

TOOLS & TECHNIQUES

THE NEED FOR TOURISM SATELLITE ACCOUNTS: A FLORIDA CASE STUDY

MORE BASIC ESTIMATING METHODS REACH ONLY THE TIP OF THE ICEBERG

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***Executive Summary.** This paper highlights the importance of developing a Tourism Satellite Account (TSA) method of estimating tourism expenditure impact, using Florida's economy as a case study. Because tourism does not exist as a distinct sector and its expenditures are among several sectors, it is difficult to identify its impact on the state economy. The TSA method separates out all tourism-related activity within gross state products (GSP). Developed by the World Tourism Organization, the TSA method is used by over 70 countries, the Bureau of Economic Analysis (BEA) at the national level, and a growing number of states. The paper concludes by recommending a Tourism Satellite Account incorporated into a regional input-output model, such as REMI and IMPLAN, to accurately measure the full impact of tourism expenditures on the state economy. A TSA model should be used by the State of Florida to more accurately assess and monitor the tourism sector, and establish policies to mitigate problems and seize opportunities to grow tourism. TSA can provide policymakers with more reliable information for effective decision-making to guide the future of tourism development.*

Tourism continues to be the engine of economic growth and prosperity in Florida, despite the tightening of airport security after 9/11 and the wars in Afghanistan and Iraq, which pushed the U.S. tourism sector into its worst slump since World War II (Wilkerson 2003). The number of visitors to Florida in 2007 reached 82.4 million despite the ever-rising price of gasoline. A study conducted by Florida TaxWatch estimated that this number will climb to between 92.5 million (median estimate) and 100.9 million (optimistic estimate) by 2010 (Florida Tax Watch 2006).

This paper explains the Tourism Satellite Account method of estimating the impacts of the tourism industry in a state or region, as well as the importance of choosing this method over more basic impact analysis

methods—and illustrates TSA application and application for the State of Florida's economy. Because tourism does not exist as a distinct sector and its expenditures are among several sectors, it is difficult to identify its impact on the state economy. The TSA method separates out all tourism-related activity within gross state products (GSP). Developed by the World Tourism Organization, the TSA method is used by over 70 countries, the Bureau of Economic Analysis (BEA) at the national level, and a growing number of states.

Florida's current method of measuring tourism impacts

VISIT FLORIDA, the state's tourism marketing agency, tracks four economic indicators to measure the economic impact of visitors: 1) tourism/recreation taxable sales, 2) direct

travel-related employment, 3) the car rental surcharge, and 4) local tourist development taxes, i.e., bed taxes. The *2007 Florida Visitor Study* reported that the state collected \$3.9 billion in tourism/recreation sales taxes in 2007, which means that \$65.5 billion was infused into the state's economy during the year through tourist expenditures. The study also noted that tourism expenditures supported 991,300 jobs in 2007 (VISIT FLORIDA 2007).

Do our state's tourism-related output and employment estimates accurately capture the impact of visitor expenditures on the economy? Are they valid estimates? It is hard to say "yes" to these questions because VISIT FLORIDA uses a tourism/recreation sales category as a proxy to calculate tourism expenditures in its estimates. (The tourism/recreation category includes all sales by hotels and motels, bars and restaurants, liquor stores, photo and art stores, gift shops, and jewelry stores, plus admissions, sporting goods, and rentals to visitors and residents.) This creates several problems. Yes, shocking but true, for an economy as tourism-dependent as Florida's. First, this category includes expenditures by both visitors and residents. It inaccurately treats all recreation sales as tourism-related. Second, the tourism/recreation proxy does not include sales for indirect tourism output, such as toiletries for hotel guests, ingredients used to make meals served to airline passengers, and plastic used to produce souvenir key chains. Third, the proxy does not capture induced impact, which is the increased sales within the state from household spending of the income earned in tourism and supporting industries.

Induced impact is known as a multiplier effect. It means visitor spending has multiple impacts on total expenditures in the state economy. In other words, employees in tourism and supporting industries spend the income they earn from tourism on housing, utilities, groceries, and other consumer goods and services. This generates sales, income and employment throughout the state's

economy. Total economic impacts are the sum of direct, indirect, and induced impacts.

Problems in estimating tourism's economic impacts

Countries around the world have worked hard to accurately estimate the contribution of tourism to their economies and to arrange their policies accordingly. However, there are some serious problems and flaws in the basic, traditional methods used to estimate the economic impact of tourism. A major problem has been inconsistency of methods across regions/countries and/or time. Over the last three decades, countries and states have estimated tourism's economic impact with various measures and definitions. Frechtling (1994) identified eight different methodologies used to estimate tourism expenditures alone. This "pluralistic" approach to measuring the impact of tourism on national and local economies prevents valid comparisons across nations/states as well as comparisons over time within the same economy.

A second problem that arises when measuring the economic impact of tourism is that tourism is not generally treated as a separate "industry." Data for tourism is scattered among various industries. As a result, collection of comprehensive and precise data on tourism expenditures becomes a cumbersome, if not impossible, endeavor. Traditional methods focus on certain aspects of tourism's economic impact and thus fail to provide comprehensive information on tourism's contribution to an economy.

Finally, measures of tourism's contribution to an economy have generally been centered on gross expenditure (demand side). However, expenditure-based measures do not reflect tourism's impact on regional employment or gross value added, or its induced effects on other industries, all of which have to do with the supply side and are of crucial importance for local economies (Edmunds 1999).

Glossary of Economic Impact Terms

Direct tourism employment. Direct tourism employment comprises all jobs where the workers are engaged in the production of direct tourism output (e.g., hotel staff, airline pilots, and souvenir sellers).

Direct tourism output. Direct tourism output comprises all output consumed by visitors (e.g., traveler accommodations, passenger air transportation, and souvenirs).

Indirect tourism-related employment. Indirect tourism-related employment comprises all jobs where the workers are engaged in the production of indirect tourism-related output (e.g., employees of companies that produce toiletries for hotel guests, the various ingredients used to make the meals served to airline passengers, and the plastic used to produce souvenir key chains). Indirect tourism-related employment is estimated using industry-by-industry employment multipliers from the Regional Economic Analysis Division.

Indirect tourism-related output. Indirect tourism-related output comprises all output used as inputs in the process of producing direct tourism output (e.g., toiletries for hotel guests, the various ingredients used to make the meals served airline passengers, and the plastic used to produce souvenir key chains).

Induced tourism impact: Induced tourism impact is the increased sales with the region/nation from household spending of the income earned due to tourism expenditures. For instance, motel and restaurant employees spend the income they earn from visitors on food, utilities, housing, etc. This secondary spending, which is called induced impact, generates sales, income, and employment throughout the region's economy.

Input-output model. An input-output model (I-O) is a representation of the flows of economic activity between sectors within a region. An I-O model captures what each business or sector must purchase from every other sector in order to produce a dollar's worth of goods or services.

Total tourism-related employment. Total tourism-related employment is the sum of direct tourism employment and indirect tourism-related employment.

Total tourism-related output. Total tourism-related output is the sum of direct tourism output and indirect tourism-related output.

The Tourism Satellite Accounts method has emerged as a viable alternative to traditional methods to measure tourism's economic impact in a comprehensive and consistent way.

What is a Tourism Satellite Account (TSA)?

"Satellite Account" is a concept developed by the United Nations to measure the size of economic sectors that are not defined as

industries in the system of national accounts (SNA). SNA is the conceptual framework that describes the international standards for measuring Gross Domestic Products (GDP). The term "satellite" refers to the fact that a TSA is based on the input-output framework of a state/regional economy. It is a subset of general input-output accounting. Tourism is an amalgam of industries, such as transportation, accommodations, food and beverage services, recreation and

entertainment, and travel. Therefore, it is not possible to identify a set of industries, add up their output/employment, and use the result to gauge the impact of tourism in a country or region, much less a state. TSAs offer a solution to this problem by weighing the output/employment of all tourism-related industries by the ratio of tourism expenditures to total expenditures for each industry (Egon 2006).

TSAs are the outcome of the collaborative work of multiple national governments as well as international institutions, like the World Tourism Organization (WTO), the Organization for Economic Cooperation and Development (OECD), and the United Nations (UN), to create a more *comprehensive* and *consistent* measure of the economic impact of tourism. As early as 1983, the WTO called for the creation of “a uniform and comprehensive means of measurement [of tourism] and comparison with other sectors of the economy” (Smith and Wilton 1997). In 1994, the WTO started designing a TSA with the objective of presenting a comprehensive and integrated framework for estimating production, consumption, capital investment, employment, and other variables related to tourism activity.

TSAs start with a solid definition of tourism and delineation of “core” tourism industry. As accepted by the UN and WTO, TSAs define tourism as “*activities of persons traveling to and staying in places outside their usual environment for not more than one consecutive year for leisure, business, and other purposes*” (United Nations 1994). TSAs’ core tourism industry consists of five broad industries: lodging, restaurants, entertainment, transportation, and retail. TSAs first measure tourism’s impact on these industries. They then go beyond core industry and measure tourism’s indirect effect on other industries, such as printing/publishing, concrete, utilities, financial services, furnishing & equipment suppliers, food, security, administration, and so on. Thus, TSAs capture the impact of tourism on industries that benefit directly or indirectly from travel and tourism expendi-

tures. A comprehensive list of industries on which tourism’s economic impact is measured is shown in the illustration below.

A Tourism Satellite Account (TSA) is linked to a national/regional input-output table. It takes information from such a table based on the estimated share of tourism in the total sales of each industry. Fletcher terms input-output analysis as “the most comprehensive method available for studying the impact of tourism” (Fletcher 1989). Input-output accounts map out the full range of commodities that are produced by each industry in a region. An input-output table shows different industries within the national/regional economy and how they are connected through their purchase and sales relationship. TSAs expand the detail for travel and tourism commodities provided in input-output tables. They also provide detailed information on tourism-related employment and tourism-generated taxes.

Methodology for the U.S. Travel and Tourism Satellite Account

The U.S. Bureau of Economic Analysis established a Travel and Tourism Satellite Account based on seven different tables to estimate tourism output and employment impacts:

- 1) Production of commodities by industry
- 2) Supply and consumption of commodities
- 3) Demand for commodities by type of visitor
- 4) Output and value added by industry
- 5) Output by tourism commodity
- 6) Employment and employee compensation by industry
- 7) Total tourism-related employment by industry

Production of commodities by industry (Table 1). The estimates of commodities purchased by visitors and the industries that produce the commodities are from the BEA annual input-output (I-O) accounts.

Supply and consumption of commodities (Table 2). The estimates of total supply

in purchasers' prices are derived by summing domestic production by commodity in producers' prices, imports, wholesale and retail margins, and transportation costs, and adjusting for change in private inventories. Total consumption is the sum of intermediate expenditures (private and government), personal consumption expenditures, gross private fixed investment, government final expenditures, and exports of goods and services.

Demand for commodities by type of visitor (Table 3). These estimates are based on *survey data on visitor spending behavior* that are used to break down total consumption estimates from the supply and consumption of commodities table into tourism demand by type of visitor. (The surveys used for this estimate include: the Consumer Expenditure Survey of the Bureau of Labor Statistics, the In-Flight Survey of the Department of Commerce's International Trade Administration, and private surveys done by D.K. Shifflet and Associates.) Total tourism demand is the sum of demand by the four types of domestic visitors (resident households, business, government, and nonresidents). Tourism commodity ratios are estimated by dividing total tourism demand for a commodity by total demand for the commodity by all users. A commodity's tourism commodity ratio indicates the share of its output that is sold to visitors.

Output and value added by industry (Table 4). Tourism industry ratios are calculated from estimates in the production by industry table (Table 1) and from the demand for commodities table (Table 3). The industry output estimates from the production table are multiplied by the tourism commodity ratios from the demand table in order to obtain *tourism industry ratios*. The estimates of tourism output, tourism intermediate consumption, and tourism value added are calculated by multiplying industry output, intermediate consumption, and value added by the tourism industry ratios. An industry's tourism industry ratio indicates the share of its output that is sold to visitors.

Output by tourism commodity (Table 5). Domestic production is multiplied by the tourism commodity ratio in order to obtain *direct tourism output for each commodity*. Direct tourism output is multiplied by the total *commodity output multiplier* in order to derive *total tourism-related output* for each commodity. For the most recent estimates of the travel and tourism accounts, BEA used output multipliers from the Industry

Economics Division to calculate total tourism-related output by commodity.

Employment and employee compensation by industry (Table 6). The estimates of employment and employee compensation

TSA's provide information on:

- tourism's contribution to Gross Domestic/State Product
- tourism's ranking compared to other economic sectors
- the number of jobs created by tourism in an economy
- the amount of tourism investment
- tax revenues generated by tourism industries
- tourism consumption
- tourism's impact on a nation/state's balance of payments
- characteristics of tourism human resources

Source: WTO, TSA: Basic Concepts,
http://www.world-tourism.org/statistics/tsa_project/Basic_concepts_of_the_TSA.pdf

by industry are derived from the annual I-O accounts. These estimates are then multiplied by the tourism industry ratio in order to derive estimates of tourism employment and tourism compensation. Average compensation per tourism employee is calculated by dividing tourism compensation by tourism employment.

Total tourism-related employment by industry (Table 7). These estimates are derived by multiplying the estimates of tourism employment by total industry employment multipliers. BEA used employment multipliers from the Regional Economic Analysis Division to calculate total tourism-related employment by industry.

This section is drawn from the following article: "U.S. Travel and Tourism Satellite Accounts for 2001-2004" by Peter D. Kuhbach and Bradlee A. Herauf.

Strengths of the TSA method compared to traditional methods

TSAs avert, to a great extent, the problems associated with traditional methods of measuring economic impacts of tourism, providing a consistent measure of the economic impact of tourism. TSAs avoid the problem of traditional methods, which collect data from trade associations, state agencies, and consultants who "often use different definitions and vary in terms of quality and timeliness" (Kass and Okubo 2000). They allow more meaningful comparison of tourism data from different regions and different time periods. With TSAs, governments, entrepreneurs, and citizens are equipped with better data to design and evaluate public policies and business strategies for tourism.

TSAs also provide an opportunity to compare the tourism sector with greater validity. For this to happen, tourism impact methods should follow "concepts and definitions consistent with internationally accepted macroeconomic guidelines such as the System of National Accounts (SNA 1993)" (WTO 2006). TSAs avoid the demand-side

bias of traditional measures by introducing a balanced measure of the economic impact of tourism that includes both demand and supply sides. To quote the WTO:

The fundamental structure of the TSA therefore relies on the balance existing within an economy between on one hand, the demand for goods and services generated by visitors and by other consumers and on the other hand, the overall supply of these goods and services. The idea is to analyze in detail all aspects of demand for goods and services, which are associated with tourism within the economy, and to measure the relationship with the supply of such goods and services within the same economy.

Standardization of the measures of tourism's economic impact makes data on the tourism sector more comparable with other industries. Traditional methods fail to map out tourism's economic relationship with other "non-tourism" industries that supply goods and services to the tourism industry. Thus, an important benefit of using TSAs is "the ability to examine how industries seemingly unrelated to travel and tourism benefit from it" (Sacks 2004).

TSA limitations

Current TSAs have weaknesses. For example, they have made only limited progress on "non-consumption elements of tourism-related activity," such as capital formation and the treatment of durable goods (Jones, Munday, and Roberts 2003; 2997). Another problem is the seasonal nature of some, if not all, tourism-related employment, which might undermine the validity of comparisons of the tourism economy with other industries (Jones, Munday, and Roberts 2003; 2782). In Alaska, for example, summer visitors account for over 80 percent of total Alaska visitors (U.S. Dept. of Interior 2004). However, relatively small seasonal fluctuations in the number of Florida visitors relieve concerns over the seasonality of tourism employment.

List of tourism-related commodities and industries in the U.S. TTSA

<u>Tourism-related Commodities</u>	<u>Tourism-related Industries</u>
<ol style="list-style-type: none"> 1. Traveler accommodations 2. Food services and drinking places 3. Domestic passenger air transportation services 4. International passenger air transportation services 5. Passenger rail transportation services 6. Passenger water transportation services 7. Interurban bus transportation 8. Interurban charter bus transportation 9. Urban transit systems and other transportation services 10. Taxi service 11. Scenic and sightseeing transportation services 12. Automotive rental and leasing 13. Other vehicle rental and leasing 14. Automotive repair services 15. Parking lots and garages 16. Highway tolls 17. Travel arrangement and reservation services 18. Motion pictures and performing arts 19. Spectator sports 20. Participant sports 21. Gambling 22. All other recreation and entertainment 23. Gasoline 24. Wholesale trade and transportation margins on gasoline 25. Retail trade margins on gasoline 26. Nondurable PCE commodities other than gasoline 27. Wholesale trade and transportation margins on nondurable 28. PCE commodities other than gasoline 29. Retail trade margins on nondurable PCE commodities other than gasoline 30. All other commodities, except all other trade and transportation margins 31. All other wholesale trade and transportation margins 32. All other retail trade margins 	<ol style="list-style-type: none"> 1. Traveler accommodations 2. Food services and drinking places 3. Air transportation 4. Rail transportation 5. Water transportation 6. Interurban bus transportation 7. Interurban charter bus transportation 8. Urban transit systems and other transportation 9. Taxi service 10. Scenic and sightseeing transportation 11. Automotive equipment rental and leasing 12. Automotive repair services 13. Parking lots and garages 14. Toll highways 15. Travel arrangement and reservation services 16. Motion pictures and performing arts 17. Spectator sports 18. Participant sports 19. Gambling 20. All other recreation and entertainment 21. Petroleum refineries 22. Industries producing nondurable PCE commodities, excluding petroleum refineries 23. Wholesale trade and transportation services 24. Gasoline service stations 25. Retail trade services, excluding gasoline service stations 26. All other industries 27. Domestic production at producers' prices

A TSA *does not* measure induced impacts of tourism expenditures. Induced impacts rely on simple *Keynesian multipliers*.¹ Induced tourism effects result from “re-spending” wages—that is, new employees have money to spend as a result of Florida tourism. REMI and IMPLAN are two commonly used regional input-output models to estimate induced impacts of tourism. Using the REMI model, the 2005 Florida TaxWatch tourism study estimated that by 2010, tourist expenditures will support between 1.5 and 1.8 million jobs and contribute between \$102 and \$135 billion to Florida’s economy in terms of increased state output (Florida Tax Watch 2006).

TSAs in practice

TSA is rapidly becoming the standard for measuring the economic impact of tourism at national and state levels. Canada was the first country to develop a comprehensive TSA in 1994. Since then, countries like the United States, the United Kingdom, France, Spain, Mexico, Canada, Australia, Norway, Singapore, New Zealand, Switzerland, the Dominican Republic, and Sweden have adopted TSA and are at different stages of TSA development (Frechtling 1999). There are currently 70 countries or territories around the world implementing a TSA (Libreros, Massieu, and Meis 2006).

Global interest in TSAs is not limited to the countries listed above. The United Nations

1 Keynesian multiplier is the effect on demand of any exogenous increase in spending, such as visitor spending, and is a multiple of that increase—until potential is reached. If x amount of money is injected into an economy by visitor expenditures, the people who receive this money then spend most of it on consumption goods and save the rest. This extra spending allows businesses to hire more people and pay them, which in turn allows a further increase consumer spending. This process continues. At each step, the increase in spending is smaller than in the previous step, so the multiplier process tapers off and allows the attainment of equilibrium.

encourages all member countries to implement the system as rapidly as possible. In 2000, delegates representing close to a hundred countries and international organizations attended a meeting on TSAs held at UN headquarters in New York.

The U.S. was among the first countries to develop a TSA. The U.S. Bureau of Economic Analysis (BEA), with support of the Tourism Industries Office of the International Trade Administration in the U.S. Department of Commerce, developed a travel and tourism satellite account framework in the early 1990s to analyze the U.S. travel and tourism industry in a *systematic* and *consistent* way that traces travel expenditures to the industries that produce tourism goods and services. Currently, the BEA uses a TSA called Travel and Tourism Satellite Accounts (TTsAs) to measure tourism impact on the economy. The U.S. Travel and Tourism Satellite Accounts website can be found at <http://bea.gov/bea/dn2/iedguide.htm#ttsa>.

There is also a growing interest in TSAs at the state level. So far, South Carolina, Virginia, Hawaii, Delaware, New Jersey, Rhode Island, Alaska, and North Carolina have developed their own TSAs. Other states that have not yet adopted a TSA at the state level benefit from the national TSA. A 2002 report by the Southern Governors’ Association underscored the importance of reliability on the scope of tourism’s economic impact and urged all southern states to continue to “support . . . a National Travel and Tourism Satellite.” The report can be found at <http://www.southerngovernors.org/publications/PDF/TourismRpt.pdf>. (Southern Governors’ Association 2002).

The above-mentioned advantages of TSAs over other traditional measures of tourism’s economic impact make strong arguments for a “tourism state” like Florida to adopt TSA.

How to develop a TSA for Florida?

Developing a state level TSA is much difficult than a national one due to the lack of

state level demand data. A national accounting system has both supply and demand data. However, state accounts in the U.S. only provide supply data. Developing a TSA for Florida consists of two important steps. The first step is to estimate the various components of tourism demand including business and government travel spending, tourism related public and private investment, and out-of-state and in-state visitor spending.² The largest share of tourism demand consists of visitor spending. However, this is not the only tourism related spending. Government spending includes all expenditures for government travel, individual and collective non-market products such as parks and museums. Private and public investment includes expenditures for hotels, motels, highways, and other tourism related investment. For instance, a portion of highway investment is due to visitor uses; therefore, it is counted as tourism related public investment. The sector level demand data and input-output tables can be retrieved from a regional output-input model such as REMI and IMPLAN. Government spending data will be estimated from various government budget documents. Visitor spending data will be obtained through visitor surveys.

The second step involves the estimate of supply side of the economy. In other words, it requires quantifying all goods and services, which are used to meet tourism demand in the state. This includes measuring changes in economic output and employment because of direct, indirect and induced effects of tourism expenditures. It is important to note that the TSA only covers the portion of production occurs in the state due to visitor spending. For instance, if a product consumed by visitors is produced in another country/state, only a portion of money paid for that

2 For a more detailed discussion of methodological issues, please refer to the following papers: 1) "Development of a Simulated Tourism Satellite Account for the State of South Carolina", WEFA, Inc., March 19, 2001. 2) "The 2003 Louisiana Tourism Satellite Account", The Louisiana Research Team.

product will be retained in Florida, the rest will be paid to the manufacturer. In other words, the value added of visitor spending to the state economy is limited to the retained money. Therefore, the TSA will only measure the economic impact of retained money on the state economy. Total value added to the economy due to visitor spending can be estimated from REMI/IMLAN output-input tables. Likewise, total employment change resulted from visitor spending across all sectors can be estimated from REMI/IMPLAN analysis. Finally, the TSA will also allow measuring tax revenues attributable to visitor spending.

There are two ways for the state to develop a TSA, one through VISIT FLORIDA and the other through contracting with an independent research entity. Other states like South Carolina and Louisiana gather the required data and contract with an independent research institute to do the estimates. VISIT FLORIDA already has most of the data required for a TSA. We recommend that VISIT FLORIDA collaborate with an independent research organization to establish a TSA and estimate full economic impact of visitor expenditures. At the development stage of the model, VISIT FLORIDA should receive inputs from government officials, tourism sector representatives, and expert researchers. In order to allow comparison between the current and new estimates, the new model should be used to estimate the economic impact of tourism for last ten years and both current and new models should be used during a five-year transition period.

Conclusions

The TSA is a promising method of measuring tourism's contribution to regional, state, and national economies. It alleviates some of the problems associated with more basic, traditional methods and provides more consistent and comprehensive information on tourism's economic impact. To summarize, compared with more basic methods, estimates provided by TSAs are more:

- comparable across countries, regions, and states
- consistent over time
- compatible with the standard measure of a national economy

Tourism plays a vital role in Florida's economy and its contribution to Florida's economy grows yearly. Given the fact that the economic contribution of tourism is spread across different sectors, it is very difficult to accurately identify how tourism contributes to the state economy. It is very important for Florida policymakers to have accurate information on tourism to devise coherent and effective policies. A Florida Tourism Satellite Account can provide more *consistent* and *comprehensive* information on Florida's tourism economy for industry planning purposes.

The development of a TSA can be of real policy value. A TSA would be particularly useful for Florida policymakers concerned with prospects for, and benefits from, specific industrial sectors. TSA offers a reliable way to measure the size of the tourism industry and document its impact on the economy. This method allows a much more detailed analysis and tracking of tourism expenditures in both core tourism sectors and other tourism-related sectors. It also provides a rigorous and reliable basis for comparing between tourism and other sectors in terms of their contribution to the state economy. With a TSA model, it will be possible to know tourism sector ranking compared to other economic sectors. The model will provide better estimates in terms of the number of jobs created and total contributions to Gross State Product made by the tourism sector. The model will generate more accurate and comprehensive data to policy makers to make informed decisions on tourism-related policies, priorities, and regulations to maximize tourism economic impact. Therefore, we strongly recommend developing a Tourism Satellite Account incorporated into a regional input-output model, such as REMI and IMPLAN, to reveal direct, indirect, and induced impacts of tourism on Florida's economy.

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